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### REGIONAL MANAGEMENT OF HOUSEHOLD HAZARDOUS WASTE IN THE PIONEER VALLEY

Summary Report



Prepared by the
Pioneer Valley Planning Commission
in cooperation with the the
Regional Household Hazardous Waste Management
Advisory Committee

Funded by a Service and Innovation Grant from the Massachusetts Executive Office of Communities and Development



REGIONAL MANAGEMENT OF
HOUSEHOLD HAZARDOUS WASTE
IN THE PIONEER VALLEY:
SUMMARY REPORT

This project was funded in part under a Strategic Planning Grant from the Massachusetts Executive Office of Communities and Development

Additional Funding was provided by the City of Agawam and Springfield Resource Recovery Systems, Incorporated

### **ACKNOWLEDGEMENTS**

The assistance of the members of the Regional Household Hazardous Waste Committee is very much appreciated.

Karen Bouquillon, Amherst Recycling Coordinator
Geoffrey Brown, Graphics Technology International, South Hadley
Merle Buckout, Massachusetts Department of Environmental Protection
John Foley, Springfield Resource Recovery, Inc., Agawam
Bettye Anderson Frederic, Amherst Board of Health
Marion Gartman, Holyoke Conservation Commission
Roy Hart, Monsanto Corporation, Springfield
Brenda Murphy, Laidlaw Environmental Services, North Andover
Michael Pattavina, Springfield Department of Public Works
Lynn Rubinstein, Holyoke Conservation Director
Randy White, Springfield Public Health Department

The staff of The Waste Watch Center in Andover, MA, in particular Carolyn Dann, provided research and writing for the financial and funding section of this report.

Grace Offen, Household Hazardous Waste Coordinator of the Office of Technical Assistance of the Massachusetts Executive Office of Environmental Affairs, kindly reviewed the brochure, "Household Hazardous Waste Disposal Guide."

REGIONAL HHW MANAGEMENT: SUMMARY REPORT	

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### INTRODUCTION

ommunities in the Pioneer Valley Region, like communities across the United States, face the problem of how to safely dispose of household hazardous waste (HHW). Improper disposal of hazardous wastes by residents poses threats to the quality of surface water, groundwater, and drinking water supplies, to the safety and health of municipal and refuse workers, and to regional air quality. An estimated 2,750 tons of HHW are disposed of each year by regional residents.

Several of the region's communities already hold one-day HHW collections which have been successful. However, these collections do not reach all of the region's residents. Property owners in particular have limited options for disposing of existing accumulated toxic material when they move.

In response to the problems of HHW, the Pioneer Valley Planning Commission (PVPC) developed this plan for regional HHW management. The plan examines several areas of HHW management, including regional options for collection and disposal, educational strategies to inform area residents, and a determination of the best methods to achieve reduced costs through regional approaches.

From October 1994 to May 1995 an advisory committee comprised of community, regulatory, and private industry representatives met with Pioneer Valley Planning Commission staff to study and discuss HHW management in the Pioneer Valley Region. In addition, a consultant, The Waste Watch Center of Andover, Massachusetts was hired to provide technical information on HHW collection costs and program financing. The planning effort was made possible through funding from a Municipal Incentive Grant provided by the Massachusetts Executive Office of Communities and Development.

This summary report is one of two products that resulted from this project. Much of the information collected during the HHW Management study has been included in a separate volume entitled, *Regional Management of Household Hazardous Waste in the Pioneer Valley: Technical Appendix*. Copies of the Technical Appendix are available at the offices of the Pioneer Valley Planning Commission.

### HOUSEHOLD HAZARDOUS WASTE (HHW) MANAGEMENT

### WHAT ARE HOUSEHOLD HAZARDOUS WASTES?

M any common household consumer products contain chemicals that may be hazardous to human health or the environment if improperly used, stored or disposed. Household hazardous wastes are described in the following three part definition:

**HOUSEHOLD:** wastes... derived from households.. are exempt from Federal hazardous wastes regulations under the Resource Conservation and Recovery Act (RCRA) but are more strictly regulated at the state or local level in some areas.

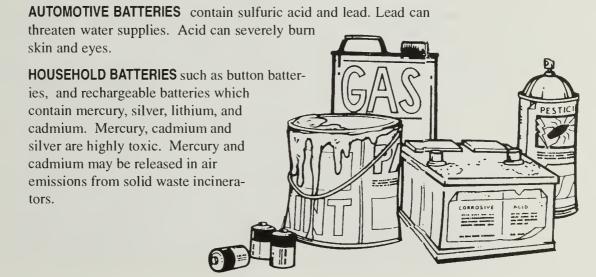
**HAZARDOUS:** exhibits a characteristic of hazardous waste as defined in RCRA (ignitability, corrosivity, reactivity, or toxicity), is listed specifically in RCRA 261.3 Subpart D, is a mixture of either, or is designated locally or by the state as hazardous.

**WASTE**: When you no longer have a use for a cleaning product, can of paint, auto battery, or pesticide and throw it away, it becomes a hazardous waste.

The Waste Watch Center, 1995

Some products used in the household may be dangerous because they are flammable, poisonous, corrosive, reactive, explosive or carcinogenic. Your health may be affected by hazardous products through ingestion, inhaling gases, or absorption through the skin. Hazardous products may affect the environment by impairing air or water quality or contaminating soil. Some chemicals are very slow to biodegrade and may accumulate in food chains. The following is a list of some of the groups of dangerous substances that may be found in the home:

**AUTOMOBILE PRODUCTS** (used motor oil, antifreeze, brake fluid) may contain toxic metals and organic compounds which can poison pets and animals. Improper disposal can contaminate surface water and groundwater.



**HOUSEHOLD CLEANERS SUCH AS** bleach, ammonia, metal polishes, wood polishes, and septic tank cleaners have a wide range of potential environmental and health risks. They may react violently if mixed with other substances, each other, or water. They may cause damage upon contact with skin, eyes or the respiratory system.

**PAINTS AND STAINS** including older latex paints and oil-based paint may contain lead or mercury. Oil-based paint can contaminate water supplies.

**PESTICIDES** including insecticides and wood preservatives may be toxic to humans, pets and the environment.

THINNERS, STRIPPERS & SOLVENTS may cause serious health effects if they come into contact with the skin or eyes or are inhaled. They are also extremely flammable.

### REASONS FOR BETTER MANAGEMENT OF HOUSEHOLD TOXICS

There are many health, public safety, environmental, financial and practical reasons for better management of HHW. A good program will be based on an understanding of which toxic materials pose the greatest threat to our public safety, health, and the environment. We offer the following reasons why household toxics, in general, should be managed carefully.

- 1. When poured down the drain into a septic system they may destroy the functioning of the system, leading to expensive repairs, may pass through the system untreated, and pose potential health problems and contamination of water supplies.
- 2. When responding to a residential fire, fire department personnel may be exposed to toxic fumes resulting from burning of accumulated toxic substances.
- 3. Storing toxic household products contributes to accidental poisonings.
- 4. Toxic materials used by homeowners contribute to indoor air quality problems.
- 5. Household toxics poured into a municipal sewer system can become volatile or create pockets of gas which can explode and endanger workers.
- 6. Sanitary workers can be injured by toxic materials mixed in with municipal solid waste.
- 7. Heavy metals, such as mercury, from household hazardous waste may be discharged into the atmosphere from incineration. They eventually settle down to the earth and may accumulate in the food chain.
- 8. Disposal of toxic material on the ground or into water bodies damages natural resources and can destroy a water supply.
- 9. A HHW program can encourage recycling, reuse, and reduction of toxic materials.
- 10. An educated public can pressure manufacturers to reformulate their products and reduce the toxic content.
- 11. The disposal of residual sludge from municipal waste water treatment plants may be made more difficult if it contains toxic material from residential disposal.
- 12. Some toxic metals are concentrated in the ash from incineration, which may require disposal in expensive lined landfills.
- 13. Citizens appreciate having a place to dispose of accumulated materials.

### ROUTES TO THE ENVIRONMENT

Some toxic household products are used or disposed of in ways which allow them to pollute the environment, either because an individual is unaware of the dangers and proper disposal methods of the products they use, or because there may be few safe disposal options available to households. When toxic household products are discarded improperly, they can have a serious impact on the environment. These wastes are primarily disposed of by putting them out in the trash but they may also be disposed of by pouring them down the drain or storm sewer, burning them, or burying them in the backyard. For some of the products listed in the beginning of this chapter, improper disposal can be dangerous and can threaten public health or contaminate the environment. The following sections describe what may happen when each of these disposal methods are used:

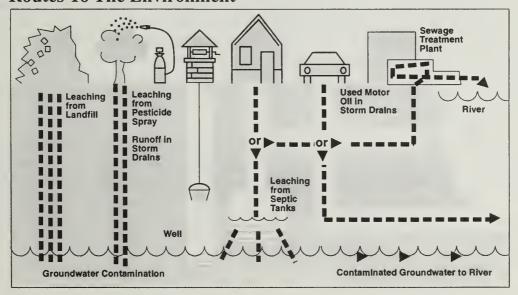
### POURING WASTES DOWN THE DRAIN OR STORM SEWER -

Some substances which are poured down household drains may corrode plumbing, collect in the trap and release fumes, cause septic system malfunctions, pass through a septic system untreated and contaminate groundwater supplies, or interfere with municipal sewage treatment facilities. Those substances which pass through sewage treatment facilities either end up in the residual sludge or are discharged to nearby rivers. If they are poured down storm drains, they may be discharged directly to rivers and streams. Once there, many toxic wastes decompose very slowly and may accumulate in the food chain. Some hazardous substances accumulate in the sludge that is a byproduct of waste water treatment, and may make sludge disposal through land spreading or composting more difficult.

### THROWING HAZARDOUS WASTES OUT IN THE TRASH -

Hazardous wastes which are discarded with the household trash can injure refuse workers when they handle the waste, and can pollute the environment around landfills and transfer stations. Hazardous materials buried in unlined landfills can contaminate water supplies or release toxic fumes. Even in lined landfills which are designed to prevent groundwater contamination, the treatment and disposal of collected leachate is made more difficult if it is contaminated by toxic material. Trash containing toxic material that is burned at an incinerator can lower air quality emissions.

### **Routes To The Environment**



### **BURNING HAZARDOUS WASTES -**

Burning of toxic substances by individuals is a very dangerous practice. Burning hazardous wastes may cause explosions. Some hazardous materials are not completely combustible and burning will release toxic fumes into the air or concentrate toxic chemicals in the ash. This practice poses a very serious health risk.

### **BURYING OR LAND SPREADING WASTES -**

Hazardous wastes spread on the ground or buried will contaminate soils, and may contaminate ground-water or be carried into water bodies by surface runoff during rainstorms.

### LEGAL DEFINITIONS AND RESTRICTIONS IN MASSACHUSETTS

HW is classified according to federal law as a solid waste. In Massachusetts, however, when it is collected from numerous households by a municipality or other entity the material is regulated as a hazardous waste, governed by M.G.L. 310 CMR 30.390-394. Before it is collected, when it is still in the possession of an individual householder, it is not regulated.

For each HHW collection event or facility an official "generator" of the waste must be designated. The designated generator is responsible for collecting, storing and transporting the HHW according to regulations. For a one-day collection event, the generator is the licensed hazardous waste management firm hired to run the collection. For a permanent collection facility, the generator can be a legal entity in the community, the owner of the collection facility, or the operator of the facility (which may be a licensed hazardous waste management firm).

State regulations 310 CMR 30.390 through 310 CMR 30.399 (cited collectively as 310 CMR 30.390) set forth standards and requirements to be met by organizers that wish to accumulate household hazardous waste and hazardous waste generated by very small quantity generators. These regulations require specific operational standards, siting selection and emergency plans.

At the time of this report, DEP was preparing revisions to 310 CMR 30.390. Some of the important proposed changes to the regulations concern the establishment of centers for surplus paint and "special management standards" for the collection and transportation of hazardous waste collected from multiple one-day HHW collection events and from HHW centers. One proposed change will allow the use of a bill of lading between pickup locations providing that a hazardous waste manifest is initiated at the last pick up point. This change would allow truck to truck transfer of hazardous waste under certain conditions. If the proposed changes to the regulations are implemented, there will be greater flexibility in the way HHW is collected and transported.

The state superfund law, Massachusetts Oil and Hazardous Material Release Prevention and Responses Act, M.G.L. C.21E, governs the clean up of releases or spills of hazardous wastes. Municipalities that collect household hazardous wastes as part of their solid waste stream also run the risk of liability under C. 21E for spills and release of these wastes at transfer stations or landfills. By separating household hazardous wastes from the general solid waste stream, a municipality can manage these wastes with greater care and reduce their liability under this law.

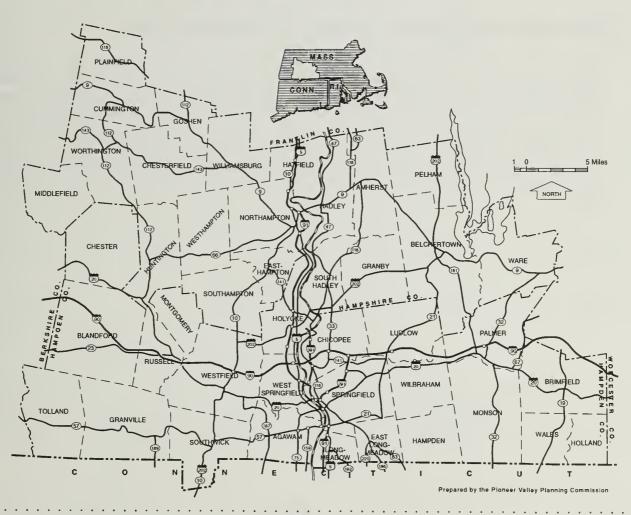
### **CHAPTER 2.**

### WHY DO WE NEED A REGIONAL APPROACH TO HHW MANAGEMENT?

### THE AREA SERVED BY A REGIONAL PROGRAM

The Pioneer Valley Planning Commission provides planning services to the forty-three communities in Hampden and Hampshire County, Massachusetts. For the purposes of this report, the service area of a regional HHW program would, therefore, be limited to those communities. The Pioneer Valley Region covers a land area of 1,179 square miles and have a combined population of 602,878 with 200,958 households (1990 census data).

### **Pioneer Valley Region**



### THE CURRENT STATE OF HHW MANAGEMENT IN THE REGION

A survey was sent to each of the 43 municipalities in the Pioneer Valley Region to determine the current management of HHW and community preferences for possible future services for HHW management. A copy of the survey form is reproduced in the Technical Appendix. Twenty-two of the municipalities replied to the survey and their responses are compiled in Table 2-2. Ten of the twenty-two communities have had a recent HHW collection event. Participation rates averaged 3% of households and average cost per participating household was \$63.70 for the most recent collection.

Responses to the list of desired HHW services depended on whether the community already collects HHW. Not surprisingly, none of the ten communities which already collect HHW wanted help with setting up and running a one-day collection. However, nine of these same ten wanted access to a regional permanent HHW facility and to a central information source. Eight of the ten wanted help in reducing collection and disposal costs.

Seventeen of the twenty-two towns and cities responding wanted access to a regional permanent facility; sixteen wanted a central information source for their residents. Only five communities wanted help with writing disposal contracts and only nine wanted examples of educational materials.

### THE ADVANTAGES OF REGIONAL VS. TOWN-BY-TOWN MANAGEMENT

Regional coordination of HHW events should reduce the costs per participant. The extent of savings is a function of the extent of coordination. Initially, regional cooperation may involve offering services to communities (writing RFPs, soliciting bids, selecting contractors, overseeing effort and invoices, technical assistance in planning, publicity, scheduling collections and transportation of any stored wastes). In a later phase, regional cooperation could involve soliciting bids for hazardous waste contractors for the entire region, establishing a cost-sharing agreement whereby residents can attend any event in the region, and offering the option for a community to participate in the regional program for a pre-determined share of the costs.

### TABLE 2-2—RESPONSES TO HHW SURVEY

			Servi	ces	Desi	red						
Community	Organizing a 1-day collection	Setting up & running a 1-day collection	Access to regional permanent facility	Help with writing disposal contracts	Examples of educational materials	Central information source	Help reducing collection/disposal costs	Help with specific waste items	Collection since 1990?	Most recent actual cost for collection	Participation rate (% households)	Cost per participant
Agawam			1			1	1		yes	\$36,500	6%	\$69.50
Amherst			1		1	1	1		yes	\$16,821	1.7%	\$116.80
Belchertown									yes	\$10,000	<3%	\$102.00
Brimfield	1								••••			
Chester	1	1	1	1	1	1	1	1				
Chicopee	1	1	1		1	1	1	1	••••	****		
Easthampton	1	1	1			1						
Granby	1	1										
Granville	1	1	1	1	1	1	1	1				
Holyoke	1	1	1	1	1	1	1		yes	\$4,332	0.5%	\$50.40
Ludlow	1		1				1	1				
Monson	1	1			1		1				****	
Northampton			1			1	1	1	yes	\$6,627	1.5%	\$35.60
Pelham			1			1	1	1	yes	\$480	5%	\$18.50
Russell			1			1		1				
South Hadley			1		1	1			yes	\$10,000	4%	\$40.00
Springfield			1			1	1	1	yes	\$35,473	0.8%	\$78.80
Tolland	1	1	1	1				1			••••	
Wales	1	1	1		1	1			••••			
Ware	1	1		1	1	1	1					
West Springfield	1		1			1	1	1	yes	\$11,389	2%-3.5%	~\$37.00
Wilbraham			1			1	1		yes	\$14,260	4.5%	\$71.30
TOTALS	13	10	17	5	9	16	14	10	10	\$145,882	avg. 3%	avg. \$63.70

A regional approach to managing HHW can provide several benefits over the existing one-day collections by:

- 1. streamlining and reducing duplication of efforts, for example, by standardizing bidding procedures and contracts with licensed hazardous waste haulers;
- 2. providing greater flexibility in serving residents who are moving and need to properly dispose of accumulated hazardous wastes;
- 3. providing service to communities that do not currently have any form of collection and would find it easier to establish a program if a regional collaborative provided guidance and expertise;
- 4. giving individual communities greater clout in negotiating lower disposal costs for hazardous materials;
- 5. taking advantage of economies of scale in disposal, contracting, and education to reduce the participant cost; and
- 6. providing greater access to grant programs, such as DEP recycling grants that favor regional approaches.

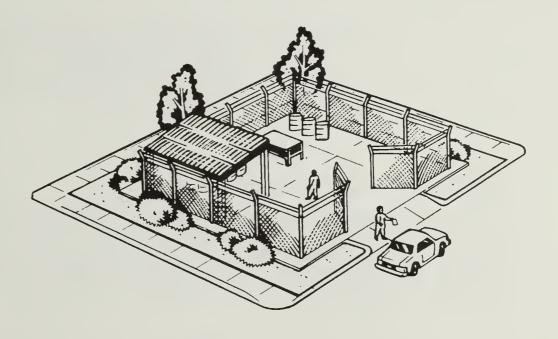
In addition a regional program could provide a centralized source of information to keep up with changing regulations and to adapt services appropriately regionwide; and the availability of a knowledgeable staff person who would handle residential questions about HHW handling and disposal issues that are currently handled by local officials and the Massachusetts DEP.

### COLLECTION OPTIONS, COSTS AND FINANCING

PVPC and the Regional HHW Management Advisory Committee evaluated several options for regional approaches to HHW collection and disposal. Three potential options for regional HHW collection and disposal were chosen. Professional consulting services were sought to undertake a financial analysis that included preparation of estimated budgets for the three management options, recommendations for cost sharing among potential program participants, and identification of potential funding sources for implementation. The consultant chosen for the financial analysis was The Waste Watch Center of Andover, MA. This chapter is a summary of their findings. For further details and information about program costs, please consult the Technical Appendix to this report which is available at the Pioneer Valley Planning Commission.

### A SUMMARY OF THE ESTIMATED COSTS FOR REGIONAL HHW Collection Options

This study examines potential costs and advantages, cost-sharing options, and funding availability for three scenarios involving regionally coordinated collection of household hazardous waste (HHW). The area includes an urban center comprised of Springfield, Chicopee, West Springfield, Holyoke, Agawam, and numerous smaller towns. Three options are considered for HHW collection in this region and are described in the following sections.



### Option A

Improvement and expansion of one-day collections through joint bidding procedures, model bid documents, contract management, technical support, planning assistance, publicity assistance, and/or administrative oversight, through the regional planning commission was the first option evaluated. The costs for a series of events depends on the participation level, which is determined by the number of events, siting, scheduling and many other factors.

Costs were estimated based on the following assumptions:

- events would be held in various areas of the region, at least six different sites, and scattered throughout the spring, summer and fall seasons (a total of 18 events would provide comparable availability as in Options B and C),
- residents would be allowed to attend any event in the region,
- participation would range from 1-5% of the total households,
- prices for collections would range from the low costs per participant seen recently (\$35) to costs seen in past years (\$50) but not as high as programs elsewhere in the country (\$75-100) due to the competition in New England and the benefit of regional coordination.
- PVPC would need to add one-third to one-half of a full time employee (FTE) position to work with the communities and contractor.

Cost projections based on this information and set of assumptions range from:

PARTICIPATION	LOW		HIGH
1% = 2,010	\$ 79,335	to	\$115,479
3% = 6,029	\$220,006	to	\$316,437
5% = 10,048	\$360,677	to	\$577,395

**CONCLUSION:** This option has the lowest total cost for the 1% participation level but has the risk that costs may revert back to higher levels at some future time.

### Option B

The second option evaluated the costs for establishment of a single, permanent HHW collection facility within the Springfield area, while providing regionally coordinated events as described under option A for the other areas of the region. A permanent facility in the Springfield area would be able to serve the City of Springfield plus 5-7 additional towns surrounding it. The total population of the area served would be 328,494 (including Springfield, Longmeadow, East Longmeadow, Wilbraham, Ludlow, Chicopee, and West Springfield) or 122,963 households.

The development of a permanent facility for the Springfield area could offer several advantages:

- the ability to store partially full drums until filled,
- the ability to store full drums until time to transport a truckload or half-truckload,
- the ability to provide a can crusher or aerosol can venting machine on-site and recycle the containers separately from the contents,
- the ability to store containers until time is available to bulk flammable materials,
- the ability to divert unopened or good condition items to an excess product exchange,
- the ability to find users for common types of materials.

Very few existing permanent facilities take advantage of all of these factors, but more and more programs are adding these activities. The programs that have municipal staff often have more flexibility and staff time to devote to the diversion and recycling of materials. In programs that have high participation, staff with time to develop active reuse and recycling programs, and space to store numerous drums, the waste management costs (variable costs) are noticeably less expensive than events. The staff and other fixed operating costs have to be computed separately.

Costs for Scenario B were estimated based on the following assumptions:

- the Springfield facility would be open to serve 125,000 households,
- it would be open at least once a month for nine months per year,
- it would be staffed by contractor staff initially,
- storage for up to 180 days would be allowed,
- diversion of reusable and recyclable materials could be accomplished by local staff or PVPC staff to achieve the low end of the variable operating costs,
- the remaining 75,000 households would be served by a series of events (a series of nine events would provide comparable availability as in Option C),
- the program would still need one-third to one-half FTE staff to coordinate events, facility operations, and intermunicipal agreements.

Cost projections based on this information and set of assumptions range from:

LOW		HIGH
\$101,437	to	\$165,331
\$204,608	to	\$366,289
\$307,779	to	\$567,247
	\$101,437 \$204,608	\$101,437 to \$204,608 to \$307,779 to

**CONCLUSION:** These costs are higher for the 1% participation level than the projected cost for events in Option A. At the 5% participation level, the lower variable operating costs are more likely which makes Option B likely to be less expensive than Option A.

### Option C

The final option evaluated the establishment of several permanent facilities, one for the high density area around Springfield and 1-4 others for groups of smaller communities in the outlying areas, such as Amherst, Northampton, Westfield, and Palmer to replace one-day collection events.

This scenario assumes that a permanent facility will serve the Springfield area and smaller facilities will serve the rest of the region. The smaller facilities are assumed to be less expensive and they would be open less frequently. They would probably also have contractor staff, at least initially. The small facilities could offer the same advantages as the larger facility, if materials could be diverted for reuse to the larger facility.

Costs for Option C were estimated based on the following assumptions:

- the Springfield facility would be open to serve 125,000 households,
- it would be open at least once a month for nine months per year,
- it would be staffed by contractor staff initially,
- storage for up to 180 days would be allowed,
- transportation could be coordinated whenever possible between all facilities,
- diversion of reusable and recyclable materials could be accomplished by local staff or PVPC staff to achieve the low end of the variable operating costs,
- the remaining 75,000 households would be served by three smaller facilities, each open at least three times per year,
- the program would still need one-third to one-half FTE staff to coordinate events, facility operations, and intermunicipal agreements.

Cost projections based on this information and set of assumptions range from:

PARTICIPATION	LOW		HIGH
1% = 2,010	\$112,896	to	\$188,183
3% = 6,029	\$193,279	to	\$389,141
5% = 10,048	\$273,662	to	\$590,099

CONCLUSION: These costs are the highest of the three options for the 1% participation level. At the 5% participation level, the costs for staff are higher than in Options A and B but the lower variable operating costs are more likely than the higher variable costs and apply to all residents in the region. Consequently, at the lower end of the range for 5%, Option C is the least expensive option.

### RECOMMENDATIONS FOR COST-SHARING PRINCIPLES FOR PIONEER VALLEY

t is important to achieve several goals through cost-sharing mechanisms. One goal is equity among towns. Any single approach may not be perfect so a combination of approaches is recommended. Another goal is to give communities an incentive to publicize the program well enough that they get a high participation level. This would be achieved with a cost-sharing system that involved, at least in part, a fixed amount paid by each town; with cost-sharing based only on actual participation, a town that advertised little and had few participants would also pay little and would have no incentive to do any more adequate promotion. We would recommend that the regional program allocate the staff and program oversight costs based on the percent of total 1-, 2-, and 3-family homes in each community in the region. Capital costs can be split equally among those eligible to use the facility or included with the fixed operating costs. The communities can share the waste management costs in relation to the participation from each community.

### FUNDING RECOMMENDATIONS

F unding sources are limited, but there are a few avenues worth exploring for capital costs. Developing momentum towards regional cooperation is crucial but may take time. Eventually the region could agree to assess surcharges on tipping fees or water or sewer bills.

There is no clear path to funding HHW programs in Massachusetts, as the experience in HHW management is somewhat limited in comparison to other states. Communities interested in developing local or regional programs receive little state assistance. Nor is there funding dedicated to HHW management from the federal government.

This does not mean that state or federal funds cannot be obtained. The region will, however, need to position itself to be first in line to receive funds if they become available and actively pursue opportunities that present themselves.

We recommend that the region employ three approaches to funding:

- 1. Presume that no sources outside the Pioneer Valley Region will be available. Evaluate costsharing mechanisms and design a funding scheme that will suit the member communities, using any combination of general taxation, solid waste surcharges, or water and sewer surcharges.
- 2. Convene your state legislative delegation and enlist their assistance in obtaining funds that may remain from the 1988 MA Solid Waste Act. Legislators should closely monitor the development of a Massachusetts HHW Plan that is in draft form within the Executive Office of Environmental Affairs, and express their support for a grant program to fund HHW management activities, with an eye toward a regional HHW Program.
- 3. The PVPC should develop a generic proposal for submission to the Region I Office of the U.S. EPA. Our recent conversations with the staff in Region I encouraged such a submission. We are not aware of any other jurisdictions submitting proposals at this time. The proposal may also be submitted to the state and the Department of Agriculture RECD if funds are uncovered.

### RECOMMENDATIONS FOR CREATING A REGIONAL PROGRAM

### CREATION OF A REGIONAL HHW COOPERATIVE

PVPC and the Advisory Committee recommend creating a regional HHW Management Cooperative through the development of an Intermunicipal Memorandum of Agreement (MOA). The HHW Cooperative would be formed by the signatories to the MOA. The MOA describes the purpose of the regional Cooperative and the duties and obligations of the signatories to the document. A copy of the MOA is attached to the end of this report and is outlined as follows:

**SECTION 1.** The Creation of a Regional HHW Management Cooperative

**SECTION 2.** Role of the Municipalities, Agencies or Organizations Signatory to this Agreement

**SECTION 3.** Role of the Cooperative and Appointed Representatives

**SECTION 4.** Role of the Pioneer Valley Planning Commission

**SECTION 5.** Cooperative Structure and Operation (membership, withdrawal from membership, rules of procedure & operation)

**SECTION 6.** Authorization/Effective Date

**SECTION 7.** Amendments

Essentially, the MOA commits municipalities to appointing a representative to a Regional HHW Cooperative. The Cooperative will have certain powers including the ability to seek and expend funds, develop grant proposals, and write contracts. The Pioneer Valley Planning Commission will assist the Cooperative by providing office support services and workspace for an administrator. The Cooperative will be composed of voting (community representatives) and non-voting (organizations, individuals, businesses, etc.) members.



### Additional Steps to Create a Regional Program

The HHW Advisory Committee agreed that a regional program, through an evolving process, could improve the management of HHW in our region. A well-organized program could provide better management of disposal practices, greater service and outreach, lower costs, and better education. The ultimate goal of the program would be to change the buying habits and disposal practices of area residents. The first step, though, is to create a regional cooperative on HHW management involving municipal representatives as well as interested agencies and businesses.

The Regional HHW Advisory Committee and the Pioneer Valley Planning Commission recommend that the Cooperative, once formed, consider these additional steps toward development of a regional program:

- 1. **CREATE A REGIONAL HHW ADMINISTRATOR POSITION.** Appointing a regional HHW administrator to provide administrative services for the cooperative could be one of the first steps taken by the Cooperative. The long and short-term duties of the administrator will be determined by the Cooperative, depending on the level of funding available for the program.
- 2. **DEVELOP A MASTER CONTRACT FOR COLLECTION EVENTS AND WASTE HAULING.** Over a period of several months, a working subcommittee could develop a master contract. This contract would be used by each participating community as a model to obtain the services of a licensed hazardous waste hauler. Alternatively, communities may act in concert to hire one hauler to service the entire Cooperative or its subregions. The regional administrator, working with the Cooperative, would develop a request for proposals to obtain bids from hazardous waste haulers.
- 3. **HOLD A NUMBER OF ONE-DAY COLLECTION EVENTS.** Once the services of haulers are obtained, the participating communities would schedule collection events.
- 4. **ORGANIZE REGIONALLY-COORDINATED ONE-DAY COLLECTION EVENTS.** The regional Cooperative may consider holding a series of multi-town one-day collection events that would be open to all residents of member communities. Providing greater scheduling flexibility for residents would improve service.
- 5. CONTINUE TO INVESTIGATE AND PURSUE THE ESTABLISHMENT OF PERMANENT FACILITIES. In the long run, it may be that greater service to homeowners, small businesses, and municipalities will be provided through the establishment of permanent HHW facilities. The regional Cooperative will continue to investigate this option.
- 6. **SEEK FUNDING TO SUPPORT REGIONAL HHW MANAGEMENT.** The Regional Cooperative, with the assistance of the Pioneer Valley Planning Commission will continue to pursue grant opportunities to ease municipal financial burdens for HHW management in the region.
- 7. **DEVELOP A STRONG EDUCATIONAL COMPONENT** based on the long-term goal of changing consumer buying habits and reducing the toxicity and volume of HHW in the region.

### Administration of the Regional Program

once a Pioneer Valley Regional Cooperative is formed, the representatives to the Cooperative will discuss the creation of a staff position to oversee administration of the program. The regional administrator, depending on funding availability, would be selected in the Fall of 1995. This section describes some of the duties and services that an administrator might provide. In coordination with representatives from participating communities, the administrator could:

- 1. develop and distribute an RFP to obtain the services of a licensed hazardous waste contractor;
- 2. develop a master contract for hazardous waste contractor services;
- 3. plan and schedule program collection in coordination with local volunteers;
- 4. provide outreach and services to non-member communities;
- 5. track waste disposal (to Temporary Storage and Disposal Facilities and Certificates of Destruction/Final Disposal);
- 6. seek ways to increase the environmental and financial effectiveness of the regional collection program;
- 7. gather data from collection events such as participation rates and quantities of material collected;
- 8. provide advertising, brochures, and posters for collection events;
- 9. organize information sessions between community representatives, waste industry, etc., to increase the understanding of HHW management and improve the regional program;
- 10. provide an annual report (volumes collected, participation, budgets, tasks, accomplishments);
- 11. answer hotline questions from households and small businesses about HHW disposal;
- 12. publicize the regional program;
- 13. develop and implement an educational strategy;
- 14. apply for grants to improve the program; and
- 15. pursue the siting of a permanent facility.

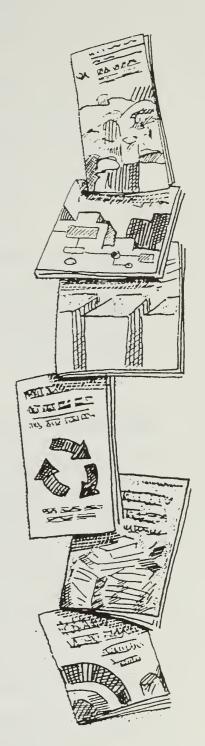
### LONG-TERM GOALS AND EDUCATIONAL STRATEGIES FOR HHW MANAGEMENT

### INTRODUCTION

ompared to cleaning up toxic contamination of drinking water or paying the medical bills of a sanitation worker injured by HHW, collecting HHW at one-day events or permanent facilities is much less expensive. Even the most successful collection programs, however, will only collect a small portion of the available HHW in our region. The most cost-effective and safest approach is to reduce the amount of HHW generated in the first place. For health, safety and financial reasons, the first priority of good HHW management is the reduction of the amount of HHW. A second priority is the appropriate recycling or reuse of unwanted materials. Finally, whatever HHW is generated needs to be disposed of properly.

Reducing the volume of the HHW stream can be accomplished at the source by reformulating products with nonhazardous materials or smaller amounts of hazardous ones or by educating consumers to use safer alternatives, smaller amounts of hazardous materials, or by eliminating the use of hazardous items altogether. Encouraging manufacturers to reformulate products is beyond the scope of the Regional HHW Management Plan. Educating the region's residents to reduce their use of hazardous materials, however, should be the primary goal of the educational strategy of the plan.

Similarly, residents should be educated about recycling and reuse possibilities for materials which would otherwise end up in the HHW stream. Unwanted materials such as paint or fertilizer can be given to a friend or civic group for their use. Many materials such as motor oil, antifreeze, and batteries are now being taken in specific recycling programs. A HHW education program should emphasize these recycling and reuse possibilities.



Finally, residents need to know how to dispose of true HHW safely at a collection event or permanent facility. The collection can also be used as an educational vehicle, to reinforce the hierarchy of waste management outlined above - reduction, recycling, and disposal.

The variety of techniques currently used in household hazardous waste education can be grouped into four broad areas:

- 1. Inform consumers at the point of sale about alternative products, toxicity, and disposal problems;
- 2. Inform consumers in the home about the safe use of products, better alternatives for future needs, and proper disposal of unwanted materials;
- 3. Inform consumers about specific ways they can dispose of household hazardous waste (collection dates, times and places); and
- 4. Educate future consumers (e.g., school children) about household hazardous waste.

### Types of Educational Tools

PVPC reviewed selected educational materials from across the country to determine the best educational strategy for the regional HHW program. Educational tools evaluated include brochures, displays, posters, videos, and school curricula. Appendix E in the Technical Appendix describes how these tools work. An example of each type of educational tool is described in the appendix as well.

### RECOMMENDATIONS FOR A REGIONAL HHW EDUCATIONAL STRATEGY

A good educational strategy for regional HHW management should focus on reduction, recycling and reuse, and proper disposal, in that order. Even the most effective regional collection system will capture only a fraction of the HHW material. The long-term emphasis of a program, therefore, should be to change the buying and disposal habits of consumers.

The primary tools of an effective HHW education program, as derived from the overview of educational materials listed above include reference materials for each household explaining what HHW is and why it needs special care, as well as giving disposal and alternatives information for a large number of chemicals. This reference material should be as concise as possible so that the needed information is easily found. Information on specific disposal methods for each community should also be produced. If the community has a permanent facility, this information can be included with the general reference material. If, instead, the community relies on occasional HHW collection days, it will be more effective to place ads in local media or send flyers to individual households in the community.

Secondary education tools are those which add to or reinforce the primary message of reduction, recycling and reuse. For a regional HHW education effort these might include school curricula, information on what to do with waste not accepted as HHW; and information targeted at specific subgroups of residents, such as people who are moving or buying a particular type of HHW.

Once a regional program is established, the following educational materials should be created and distributed:

EDUCATIONAL TOOL OR STRATEGY	PRIORITY
<ul> <li>general HHW brochure with reference disposal and substitution information</li> </ul>	Immediate
disposal information specific to a community or the regional program	Immediate
news releases	• Immediate
<ul> <li>information to give out at collection events and facilities</li> </ul>	Short Term
phone hotline	Short Term
displays and exhibits	Short Term
• posters	Short Term
information targeted for people who are moving	Long Term
development of school curricula	Long Term
slide shows and videos	Long Term

### PAYING FOR A REGIONAL HHW EDUCATION PROGRAM

The cost of any educational strategy and particular tool selected should be evaluated along with its educational effectiveness.

The program should seek funding for creation and distribution of identified education materials from:

- 1. private industry, particularly those with ties to the region or to the HHW management field;
- 2. real estate interests, including real estate agent associations and developers;
- 3. private foundations; and
- 4. government grants, at the state and federal levels.

### IMPLEMENTING A HHW EDUCATION STRATEGY FOR THE PIONEER VALLEY REGION

A s part of the current planning effort, the Pioneer Valley Planning Commission and the Household Hazardous Waste Advisory Committee created a two-sided, 8.5" x 14" brochure entitled "Household Hazardous Waste Disposal Guide" that is meant to be reproduced inexpensively and distributed by the municipalities in the region. This brochure explains:

- what household hazardous waste is,
- why it is important to manage it,

- · the priority system of reduction, recycling, and proper disposal, and
- disposal methods for 84 different types of waste.

A copy of the brochure is provided at the end of this chapter.

Additionally, PVPC and the Advisory Committee prepared a flier on recycling used motor oil, covering

- · why used motor oil should be recycled,
- how used oil threatens the environment,
- · how used oil can be recycled, and
- where the oil can be recycled.

This flier can also be reproduced and distributed by the municipalities. A copy of the flier is provided at the end of this chapter.

The "Disposal Guide" and oil recycling flier are educational tools of "immediate" priority. Early in the implementation stage of the Regional HHW Management Program, the other immediate priority educational tools—information on alternatives, specific disposal information, and news releases—should be developed and distributed. A regional logo for HHW disposal should be created and used on all educational and promotional materials, so as to catch residents' eyes and reinforce the HHW message.

The development of specific disposal information—where and when to dispose—will depend on the phasing of implementation of the regional program. For one-day collections, this could include posters, newspaper ads, bill inserts, or separately-mailed fliers. For a permanent facility, information on where and when to dispose of HHW can be delivered along with the "Disposal Guide" and reinforced periodically with newspaper ads or bill inserts.

As the regional plan is implemented, news releases should be written and distributed to all area newspapers, radio stations, and television stations. Reporters can be invited along on collection days or to permanent facilities.

Part of the implementation process for a regional HHW management plan will involve developing and distributing other educational materials. Depending on the nature of the regional program and on the budget allowed, creating displays and exhibits or staffing a phone hotline, for example, will contribute greatly to the success of HHW management in the region.

# HOUSEHOLD HAZARDOUS WASTE DISPOSAL GUIDE

Made available by Springfield. Prepared by the Pioneer Valley Planning Commission in 1995 through funding from the Massachusetts Executive Office of Communities and Development.

## ■ What is Household Hazardous Waste (HHW)?

All of us want clean air to breathe, clean water to drink, and a safe place to live. Yet almost every household has toxic, corrosive, explosive, or flammable products stored in the kitchen, garage, or basement. We use these products to clean our houses, power our cars, feed our gardens, and kill pests. Chemicals such as insecticides, oil-based paints, and varnish become Household Hazardous Waste (HHW) when we no longer have a use for them. If these chemicals are disposed of improperly, they may contaminate drinking water supplies, poison septic systems, injure sanitation workers, kill wildlife, or pollute the air.

It is your responsibility to learn about the chemicals you use and to dispose of them safely. Never bury these chemicals in your backyard or empty field. Never pour hazardous liquids into streams or storm drains, especially petroleum products such as

motor oil and gasoline. We have all heard about leaking gasoline tanks polluting groundwater - your backyard disposal of used motor oil can do the same thing. Even pouring extra household cleaner down the kitchen sink may not be a good idea. If you use a septic tank and leach field instead of a town sewer, large amounts of bleach or cleaning solutions may kill the beneficial bacteria in your septic system. This may allow untreated sewage to leach into your drinking water supply.

Your part in managing HHW may seem too small to matter, but multiply your efforts by the millions of households in the United States and you can see that a major source of environmental pollution can be controlled. In Massachusetts alone, more than three million gallons a year of used motor oil ends up poured on the ground or down the drain or thrown out in the trash. Your part does matter!

## For More Information:

Call Springfield at 787-6260;

the Pioneer Valley Planning Commission at (413) 781-6045;

the Massachusetts Department of Environmental Protection (DEP), Western Region Office at (413) 784-1100;

or the DEP Bureau of Waste Prevention at (617) 292-5953.

## PLEASE SAVE THIS FLYER.

Management of HHW is an ever-changing field. The information in this brochure is as accurate as possible, but for complex questions or the most up-to-date answers, call one of the numbers given above.

### • Third: Dispose

of true household hazardous waste properly. Use the disposal chart on the other side to help you decide what should be saved for a HHW collection. Call your town hall to find out how your town disposes of HHW. If there is no collection program for your town or region, ask your town to start one. Do not mix different chemicals for storage or transport - they could react to form a toxic gas or could even explode! Leave products in their original containers with the label intact. That will make the job of the technicians at a HHW collection site easier and safer.

## ■ What Should I Do With Household Hazardous Waste?

• First: Reduce

the amount of household hazardous waste you produce. Using up the product according to directions is the best way to dispose of materials you already have. Next time, buy only the amount you need. Decide whether you really need the product at all. Read the product label and make sure it does what you want. Use alternative, safer products instead. For example, you can use pump sprays instead of aerosols and cedar blocks instead of mothballs. Check your local library or bookstore for information on more alternatives.

• Second: Recycle

whenever possible. Give leftover paint, fertilizer, cleaning solutions, etc., to a neighbor, a civic group such as the garden club, theatre group, or scouts, or to the town itself. One caution: if you have old pesticides, make sure they are still legal for use before giving them away. Recycling programs exist for many products, such as motor oil, antifreeze, and button and car batteries. If these programs are not available where you live, ask your town to help start one.

# HOUSEHOLD HAZARDOUS WASTE DISPOSAL GUIDE

**DISPOSAL METHODS** 

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Household Items	Fluorescent lamp	(if pre-1978, separate lamp from ballast; save ballast for	ents or	straightener	Medications	Antibiotics	(if on sewer)	Chemotherapy drugs	Mothballs	Perfume	graphic chemicals	Polish	Copper	Floor	Furniture (solvent base)	Nail	Nail polish remover	(if on sewer)	Shoe	Silver	Rubbing alcohol	Rust remover (phosphoric acid base)	Shoe dye	Smoke detector (ionizing)	Spot remover	
	0		1,000	O ro	Cor ©	) ;	1	9	S	0	0	0	(f) or (e)	or More	t base)	9	or O	U)or ©	1	0	<b>E</b>	1	4)	O or	)	4
Household Items	Aerosol products	Batteries	Alkaline	Mercury	Hearing aid	Cleaners	Abrasive powders	Drain	Glass	Mildew	Oven	Septic tank cleaner	Toilet	Upholstery/rug (detergent <b>[]</b> or <b>@</b>	Upholstery/rug (solvent base)	Window	with bleach	with ammonia	Cosmetics	Disinfectant	Dry cleaning fluid	Empty containers	Empty aerosols	Flea collar		T GOT GARAGE
Home Improvement	Artists' paint	Concrete cleaner	Driveway sealer	Fiberglass resin	a	Glue with solvents		Latex paint (let dry out, then dispose in	Oil-based paint	Paint remover	Paintbrush cleaner (phosphate Mor ©	Paintbrush cleaner (solvent base)	Primer • •	Putty, grout, caulk, glaze, spackle	Roofing tar	Rust paint		Stripper (lye base)			ine		Wood preservatives			
Automotive Products	Antifreeze 🖒 or 🔾	Auto batteries	Brake fluid	Car polish or wax	Carburetor cleaner	Degreasers	ther fuels	Motor oil	Transmission fluid	Windshield washer		Lawn and Garden Products	Fertilizer w/weed killer	Fertilizer without put in	weed killer compost	Fungicides	Insecticides, roach & ant poison •	Charcoal lighter fluid	Pool chemicals	Rodent bait	Root killer	Weed killer				

RECYCLE

FLUSH SMALL AMOUNTS (less than 1/2 cup)

SAVE FOR A HHW COLLECTION

DISPOSE OF DRIED SOLIDS IN TRASH Remember: Using up a product is the best way to dispose of it. If you can't use it, give it away to someone who can.

Solvent-containing products have the words "Flammable," "Combustible," or "Contains petroleum distillates" on the labels. Note:



### Why Should I Recycle?

 ${f R}$  ecycling your used oil protects the environment by preventing contamination and conserving nonrenewable petroleum. Motor oil that has been used in your car or truck engine contains heavy metals, such as copper, zinc and cadmium, picked up from the engine. Even before you use it, motor oil contains toxic chemicals from the manufacturing process. These chemicals and heavy metals are dangerous enough to the environment that Massachusetts defines used motor oil as a "hazardous waste." When you recycle the oil, the contaminants are removed and the oil can be re-refined for reuse or reprocessed for fuel. Forty-two gallons of crude oil yields only two-and-onehalf quarts of motor oil (along with other products), but one gallon of used motor oil will make the same two-and-one-half quarts. One gallon of reprocessed oil can generate enough energy (about 140 thousand BTUs) to meet the electricity needs of your home for half a day.

### How is Used Motor Oil a Threat to the Environment?

Used oil is the single largest source (over forty percent) of oil pollution in U.S. harbors and waterways. At 385 million gallons per year, Americans throw away thirty-five times more oil than was spilled in the entire Valdez oil spill. At least half that amount is thrown out by do-it-yourself oil changers.

If the used oil is not recycled and instead is poured down a drain, thrown into the trash or poured out on the ground, it can eventually work its way into nearby waterways:

- One gallon of used oil can create an eight-acre slick on surface water, threatening fish, waterfowl and other aquatic life.
- Over time, used oil disperses throughout a body of water, polluting the sediments as well as the surface. This process can kill the microorganisms that form the base of the food chain.
- One gallon of used oil can contaminate thousands of gallons of groundwater or surface drinking water.

If used oil is poured down a sewer that is connected to a waste water treatment plant, the heavy metals in the oil can greatly limit the plant's ability to safely and cheaply dispose of the sludge which is the primary byproduct of sewage treatment. If the oil ends up in an unlined landfill, it can leach out and contaminate the groundwater.

Improper disposal leads to health hazards and, indirectly, increased costs. Changing the oil in your car yourself, may save money but not properly disposing of the used oil will probably mean spending more money—especially on cleaning up drinking water—in the future.

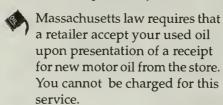
### How Do I Recycle Used Oil?

Used oil is recyclable only if it arrives at the recycling point just as it came from your vehicle. Your oil should never be mixed with other elements: gasoline, antifreeze, engine degreasers, solvents, pool "shock," water, dirt, leaves and other debris. Contamination with any of these elements ruins your oil for recycling and can ruin all of the oil in a collection tank.

Drain your oil into a clean, sturdy container with a tight-fitting cap. Try to avoid containers that previously held a "hazardous" substance such as antifreeze, paint thinner or chlorine beach. If possible, choose a container which can be taken home and used for oil again. Leave enough room in the container so the oil can expand if it warms up in the sun. Transport the used oil container in a sturdy box in the trunk or on the back floor of your vehicle.

### Where Can I Take the Oil for Recycling?

T here are four possible recycling points for your used oil. Call first to find a place for your oil.



Some service stations now accept used oil without a receipt.

Some communities accept used oil at their transfer stations. If your community does not accept used oil now, ask town officials to investigate doing so in the future.

Take the oil to a Household Hazardous Waste Collection. Not all such collections accept used oil.

The information in this brochure was reprinted by permission of the Massachusetts Water Resources Authority, in part, and derived from material prepared by the Local Hazardous Waste Management Program for Seattle-King County, in part.

This brochure was prepared by the Pioneer Valley Planning Commission in 1995 with funding from the Massachusetts Executive Office of Communities and Development.

### **CHAPTER 6.**

### CONCLUSIONS

or financial, environmental, health and public safety reasons, household hazardous waste should be managed carefully. If not properly handled and disposed of, it can contaminate drinking water supplies, injure municipal workers, impact air quality, destroy wildlife, and cause toxins to accumulate in the food chain.

Three collection scenarios were investigated and showed overlapping ranges of participant cost. Choosing the least expensive option will depend on accurately predicting participation rates and carefully designing any permanent facilities. Higher participation rates are required in some cases to achieve cost savings per participant, but overall program costs are then higher. Greater diversion of wastes such as oil, paint, and household cleaning products can lower disposal costs significantly. Finally, competitive bidding practices by licensed hazardous waste haulers may lower program costs.

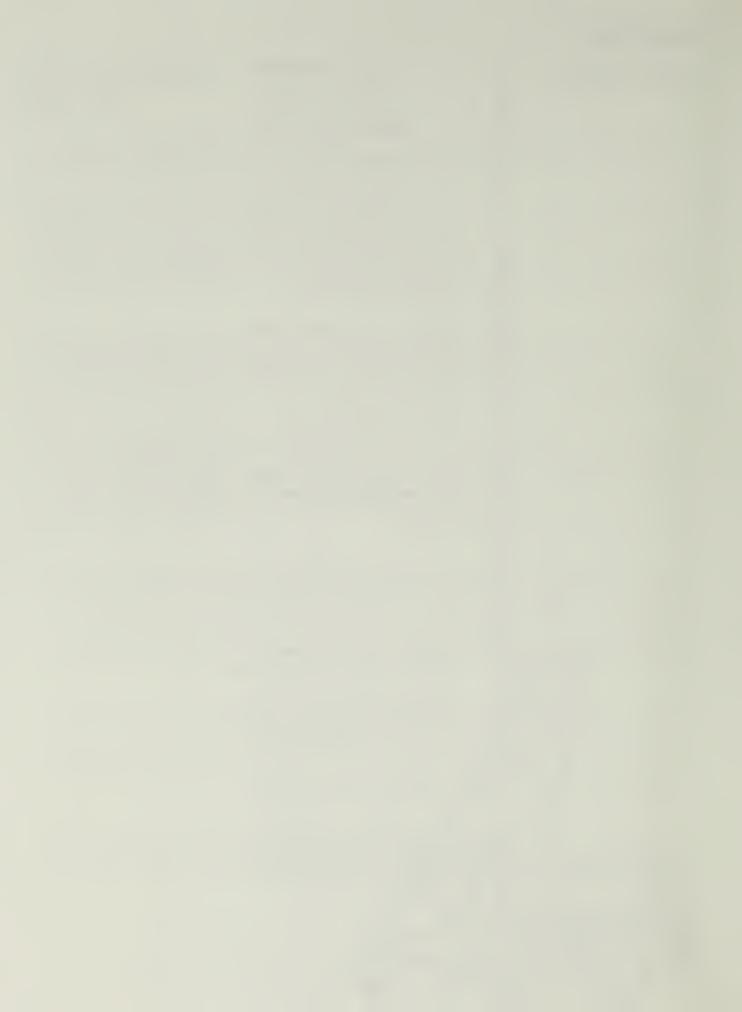
If a regional collection program is established, it is recommended that any program cost-sharing use at least two different methods. Waste management costs should be shared in relation to the number of participants from each community. Other operating and maintenance costs should be shared in proportion to the percentage of 1-, 2-, and 3-family homes, to avoid unfairly burdening urban areas. Capital costs can be shared in a similar manner.

Funding sources are limited, but there are a few avenues worth exploring for capital costs. Developing momentum towards regional cooperation is crucial but may take time. Communities should closely monitor the development of a Massachusetts HHW Plan that is in draft form within the Executive Office of Environmental Affairs, and express their support for a grant program to fund HHW management activities, with an eye toward a regional program. In addition, the PVPC should develop a generic proposal for submission to the Region I Office of the U.S. EPA.

The Pioneer Valley Planning Commission and the Regional HHW Advisory Committee agree that the communities of the Pioneer Valley Region should move towards greater cooperation on HHW management. Several potential advantages to cooperation were identified including streamlining and reducing duplication of efforts, providing greater service and flexibility to residents, providing service to communities that do not currently have any form of collection, giving individual communities greater clout in negotiating lower disposal costs for hazardous materials, taking advantage of economies of scale in disposal, contracting, and education to reduce the participant cost; and providing greater access to grant programs.

To achieve the benefits of regional cooperation an entity must first be formed to oversee the creation of a regional program. A Memorandum of Agreement (MOA) has been developed which commits the signatory communities to sending a representative to a Regional HHW Cooperative. If enough communities sign the MOA, the Cooperative will hold its first meeting in the Fall of 1995. The Cooperative will consider hiring an administrator, developing a joint bidding process for one-day collection events, and taking other steps that they determine will improve the management of HHW in this region.

The Cooperative can evolve into a program that provides greater service to regional communities, possibly by providing permanent facilities, and by obtaining greater funding. The long-term goal of the Cooperative should be to change the buying habits of consumers so that the volume and toxicity of HHW is reduced. A strong educational component will be required to achieve this goal.



### ATTACHMENT SAMPLE MEMORANDUM OF AGREEMENT



### A Sample

### Memorandum of Agreement for Establishment of a Regional Household Hazardous Waste Management Cooperative

by and among the Municipalities of the Pioneer Valley Region, and other municipalities or organizations which may approve this agreement.

This memorandum is agreed to by and among the Municipalities of ("the municipalities"), the Pioneer Valley Planning Commission (PVPC), and other municipalities or organizations which may approve it for the purpose of establishing a regional Household Hazardous Waste Management (HHW) Cooperative with a defined set of responsibilities, powers and procedures.

Whereas, the municipalities, PVPC, and other organizations approve and support the proposal for the creation of a regional HHW Management Cooperative, recognizing such potential benefits as streamlining and reducing duplication of existing efforts, providing greater flexibility in serving residents who are moving and need to dispose of accumulated materials, reducing participant and municipal costs, providing service to communities that do not currently have any form of collection, and providing greater access to grant programs;

Whereas, the combination of effective education, accessible disposal systems, and greater participation rates can result in more HHW being removed from the region's homes, small businesses and surrounding environment.

Whereas, the municipalities, PVPC, and other organizations recognize the need to develop a program that is cost-effective and provides protection of the environment through proper handling and disposal of HHW material;

Whereas, the municipalities, PVPC, and other organizations recognize that decisions involved in executing this and future agreements and grants concerning the HHW program will have an impact on each participating community;

It is therefore resolved, that the municipalities, the Pioneer Valley Planning Commission, and any other organizations which may approve this memorandum do hereby form an entity known as the Regional HHW Management Cooperative. The Cooperative shall be run by an advisory committee appointed by the municipalities and PVPC.

### Section 1. The Creation of a Regional HHW Management Cooperative

The participants shall form a permanent organization to be known as the Regional HHW Cooperative. A committee consisting of one representative from each member municipality and one representative from the Pioneer Valley Planning Commission (PVPC) shall be appointed to oversee the Cooperative. The municipal representative shall be appointed by the chief elected official in each community. The PVPC representative shall be appointed by the Executive Director of PVPC. The Cooperative may invite any other person or organization concerned with HHW to become an associate member, and to participate in committee deliberations, but not to vote.

### Section 2. Role of the Municipalities, Agencies or Organizations Signatory to this Agreement

The municipal signatories to this agreement shall each designate a representative to the Regional HHW Committee.

The signatories to this agreement shall annually consider funding of the cooperative based on a contribution of .05 cents per capita based on the 1990 federal census up to a maximum contribution of \$1,000. For demonstration purposes, communities would provide funding equivalent to the following chart:

Community population	Potential Contribution
500	\$25
1,000	\$50
5,000	\$250
10,000	\$500
20,000	\$1,000
50,000	\$1,000

In addition, the Pioneer Valley Planning Commission shall annually consider a contribution of one thousand dollars (\$1,000).

Any proposal for municipal funding will be subject to approval by Town Meeting or City Council in the case of a municipality, and subject to approval by the Pioneer Valley Planning Commission in the case of PVPC.

### Section 3. Role of the Cooperative and Appointed Representatives

The purpose of the Cooperative shall be to increase intergovernmental cooperation on HHW management. The Cooperative may seek, receive and expend funds from municipal or other sources in order to pursue the goal of greater regional cooperation in HHW management. To carry out its functions the Cooperative shall have the power to:

- a) seek an annual contribution to pay for costs, such as administration, from each member municipality and PVPC;
- b) receive money and support from any source by donation or appropriation, provided that such money is for the purpose of carrying out the business or goals of the Cooperative;
- establish a bank account, enter into contracts, and to expend money, provided that all such contracts and expenditures are for the sole purpose of carrying out the regular business and functions of the Cooperative as a whole;
- d) issue statements and materials in the name of the Cooperative;
- e) develop proposals for, seek, receive, and implement assistance and grants, provided that the proposal for each shall be approved by two-thirds of the members of the Cooperative.

The Cooperative shall not be empowered to make binding decisions or commitments other than the contracts or expenditures listed above.

The appointed representatives to the Cooperative shall have the following responsibilities:

- a) To attend an initial meeting(s) to establish the rules and regulations governing the work of the Cooperative;
- b) To participate in meetings of the Cooperative;
- c) To attend an annual meeting to assess the progress of regional HHW management;
- d) To act as their community's contact to disseminate information about the workings of the cooperative.
- e) To carry out the role and goals of the Cooperative;
- f) To cooperate in developing and implementing a regional HHW program.

### Section 4. Role of the Pioneer Valley Planning Commission

The Pioneer Valley Planning Commission (PVPC) shall have the following responsibilities:

- a) To assist the Cooperative members in meeting their responsibilities under this memorandum;
- b) To seek grants or other sources of funding to assist the Cooperative;
- c) To provide office support services and workspace for an administrator provided that PVPC has available grant or other funds to pay for the cost of such services;
- d) To designate a voting representative to participate in the Cooperative.

### Section 5. Cooperative Structure and Operation

### A. Membership

The Cooperative shall have two categories of membership:

- 1. **The Full Voting Membership** category is limited to those municipalities that sign this agreement.
  - Each municipality shall be considered one member of the Cooperative and accordingly have one vote. The Cooperative may be expanded by admitting to full membership any municipality desiring membership, and that such municipality shall sign this Memorandum of Agreement.
- 2. **Associate Membership**: By a majority vote, the Cooperative may invite any other person or organization to participate in its activities as an associate, non-voting member.

### B. Withdrawal from Membership

Any member municipality may withdraw from participation in the Cooperative upon six months written notice signed by the Board of Selectmen, Board of Aldermen or City Council with concurrence of the Mayor.

### C. Rules of Procedure & Operation

The Cooperative shall elect officers and adopt rules governing its decision-making process, quorum for meetings, frequency and location of meetings, establishment of subcommittees, address for purpose of correspondence and general operations. Adoption of these rules shall require an affirmative majority vote of all voting members.

The Cooperative shall also hold open meetings in compliance with Massachusetts General Laws regarding Open Meetings (ask Dana).

### D. Cooperative Evaluation

Twelve months after the execution of this agreement the representatives to the Cooperative shall review and evaluate its performance and make recommendations concerning its future operations. After such initial evaluation, the Cooperative shall conduct similar annual evaluations.

### Section 6. Authorization/Effective Date

This agreement has been authorized by approval of the Select Board, City Council, or Board of Alderman in each municipality if required by city charter, in accordance with Massachusetts General laws Chapter 40, Section 4a, and by vote of the Pioneer Valley Planning Commission. This Memorandum will become effective when it is signed by eight participating parties.

### Section 7. Amendments

This memorandum of Agreement may be amended at any time, if such amendment has been authorized by a vote of the Pioneer Valley Planning Commission and by votes of the Select Board, City Council or Board of Aldermen in each municipality, in accordance with Massachusetts General Laws Chapter 40, section 4a.

Official, Title	Date	



